

The opinion in support of the decision being entered today was not written  
for publication and is not binding precedent of the Board.

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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Ex parte JOHN H. LIEDER and KEN S. LAU

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Appeal No. 2006-2007  
Application No. 09/996,255

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ON BRIEF

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**MAILED**

**AUG 28 2006**

U.S. PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

Before THOMAS, JERRY SMITH, and SAADAT, Administrative Patent  
Judges.

SAADAT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134(a)  
from the Examiner's final rejection of claims 1-6, 12, 13, 17,  
18, 20, 21 and 27-29. Claims 7-11, 14-16, 19 and 22-26 have been  
canceled.

We reverse.

BACKGROUND

Appellants' invention relates to a circuit for detecting the polarity of a voltage present across a set of telephone wires in both the on-hook and the off-hook states. An understanding of the invention can be derived from a reading of exemplary independent claim 1, which is reproduced below:

1. A circuit for detecting a reversal in polarity, comprising:

a differential amplifier;

a low pass filter connected in series with the amplifier;  
and

a Schmidt trigger connected in series with the low pass filter.

The Examiner relies on the following prior art references:

Albouy	4,540,853	Sep. 10, 1995
Hwang et al. (Hwang)	5,987,120	Nov. 16, 1999
Bijman et al. (Bijman)	6,590,973	Jul. 8, 2003 (filed Nov. 9, 2000)

Claims 1-6, 13, 17, 18, 20, 21 and 27-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hwang and Albouy.

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Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hwang, Albouy and Bijman.

Rather than reiterate the opposing arguments, reference is made to the briefs and the answer for the respective positions of Appellants and the Examiner.

#### OPINION

The initial burden of establishing reasons for unpatentability rests on the Examiner. In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). The Examiner must produce a factual basis supported by a teaching in a prior art reference or shown to be common knowledge of unquestionable demonstration, consistent with the holding in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). Our reviewing court requires this evidence in order to establish a prima facie case. In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984); In re Cofer, 354 F.2d 664, 668, 148 USPQ 268, 271-72 (CCPA 1966). However, "the Board must not only assure that the requisite findings are made, based on

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evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." In re Lee, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

The focus of Appellants' arguments is that the arrangement of transistor 59, resistor 591 and capacitor 592 of Hwang does not reasonably correspond to the claimed low pass filter (brief, page 3). Appellants further point out that the arrangement of these components do not remove high frequency components and therefore, is not a low pass filter (brief, page 4). The Examiner responds by stating that Hwang provides for components similar to a series combination of a resistor (106) and a capacitor (130) providing an output at node B shown in Appellants' Figure 1 (answer, page 10). Appellants argue that the components identified by the Examiner as making up the low pass filter actually pass the extremely high frequencies and fail to constitute a low pass filter (brief, page 4; reply brief, pages 2-3).

After a review of Hwang, we agree with Appellants that the arrangement of transistor 59, resistor 591 and capacitor 592, shown in Figure 1 of the reference, is not a low pass filter. Such arrangement, as positioned between nodes A and C, is not the same as what is shown between nodes A and C of Appellants' Figure 1. Merely having a resistor and a capacitor is not sufficient since the specific arrangement of these components is different and the response at node C of Hwang is not a smooth filtered output. "In reviewing the examiner's decision on appeal, the Board must necessarily weigh all of the evidence and argument." In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). In this case, contrary to the Examiner's position (answer, page 10), not every arrangement that includes such components reads on the claimed low pass filter merely because the specific arrangement of the elements of a low pass filter is not specified in the claims. As discussed by Appellants (reply brief, page 3), the arrangement disclosed by Hwang fails to provide the claimed effect, i.e., blocking high frequencies.

In view of our analysis above, we find that the Examiner has provided insufficient evidence to show that the transistor, resistor and capacitor arrangement of Hwang constitute a low pass filter. Therefore, the Examiner has failed to set forth a prima facie case of obviousness as the necessary teachings and suggestions related to the claimed low pass filter, as recited in independent claims 1, 18 and 29, are not shown. Accordingly, based on the weight of the evidence and the arguments presented by the Examiner and Appellants, we do not sustain the 35 U.S.C. § 103 rejection of claims 1, 4, 13 and 20 as well as claims 2, 3, 5, 6, 17, 18, 21 and 27-29, dependent thereon, over Albouy and Hwang.

Turning now to the 35 U.S.C. § 103 rejection of claim 12, we note that the Examiner further relies on Bijman. However, the Examiner indicates that Bijman was relied on for teaching the features of claim 7, which was the base claim of claim 12. As the Examiner has pointed to no additional teaching in Bijman that would have overcome the deficiencies of Albouy and Hwang as discussed above with respect to the independent claims, the 35 U.S.C. § 103 rejection of claim 12 over Albouy, Hwang and Bijman cannot be sustained.

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## CONCLUSION

In view of the foregoing, the decision of the Examiner rejecting claims 1-6, 12, 13, 17, 18, 20, 21 and 27-29 under 35 U.S.C. § 103 is reversed.

REVERSED

JAMES D. THOMAS  
Administrative Patent Judge

*Jerry Smith*  
JERRY SMITH  
Administrative Patent Judge

BOARD OF PATENT  
APPEALS  
AND  
INTERFERENCES

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